



IFC

Docket No. 67489-PCT-US/JPW/AJM

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant : Stephen P. Goff and Guanxia Gao  
Serial No. : 10/568,396  
International Application No.: PCT/US2004/026162  
Filed : August 12, 2004  
For : ZAP PROTEIN AND RELATED COMPOSITIONS AND METHODS

1185 Avenue of the Americas  
New York, New York 10036  
June 19, 2006

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INFORMATION DISCLOSURE STATEMENT**

In accordance with their duty of disclosure under 37 C.F.R. §1.56, applicants direct the Examiner's attention to the following documents which are listed below and on Form PTO-1449 (**Exhibit A**).

This Information Disclosure Statement is being submitted pursuant to 37 C.F.R. §1.97(b)(3) before the mailing of a first Office Action on the merits. Thus, this Information Disclosure Statement should be entered and considered.

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The subject application is a §371 national stage of PCT International Application No. PCT/US04/26162. A copy of a February 2006 International Search Report for PCTUS04/26162 is enclosed (**Exhibit B**).

1. U.S. Patent No. 5,776,696 A, issued July 7, 1998 to Salowe, S.P.;
2. U.S. Patent No. 6,251,620 B1, issued June 26, 2001 to Hatada et al.;
3. U.S. Application Publication No. 2001/0011381 A1, published August 2, 2001;
4. Gao, G. et al. (September 2002) "Inhibition of Retroviral RNA Production by ZAP, a CCCH-type Zinc Finger Protein" Science Vol. 297, pages 1703-1706 (**Exhibit 1**);
5. Bick M.J. et al. (November 2003) "Expression of the Zinc-Finger Antiviral Protein Inhibits Alphavirus Replication" J. Virol Vol. 77, No. 21, pages 11555-11562 (**Exhibit 2**);
6. Database NCBI Sequence Viewer, NP\_766633, (2006) CCCH-type Zinc Finger Protein [gi:27375002] pages 1-21 (**Exhibit 3**);
7. An, D.S. et al., (1997) J. Virol, Vol. 71 pgs. 1397-1404 (**Exhibit 4**);

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8. Bothe, G.W., Haspel, J.A., Smith, C.L., Wiener, H.H., Burden, S.J., (2000) Genesis, Vol. 26, pgs. 165-166 **(Exhibit 5)**;
9. Carballo, E., Lai, W.S., Blackshear, J.P., (2000) Blood, Vol. 95, pgs. 1891-1899 **(Exhibit 6)**;
10. Chen, C.Y. et al., (2001) Cell, Vol. 107, pgs. 451-464 **(Exhibit 7)**;
11. Dean, J.L., et al., (2001) Molecular & Cellular Biology, Vol. 21, pgs. 721-730 **(Exhibit 8)**;
12. Der, S.D., Yang, Y.L., Weissmann, Williams, B.R., (1997) Proceedings of the National Academy of Sciences of the United States of America, Vol. 94, pgs. 3279-3283 **(Exhibit 9)**;
13. Gao, G., Goff, S.P., (1999) Molecular Biology of the Cell, Vol. 10, pgs. 1705-1717 **(Exhibit 10)**;
14. Kerr, I.M., Brown, R.E., (1978) Proceedings of the National Academy of Sciences of the United States of America, Vol. 75, pgs 256-260 **(Exhibit 11)**;
15. Lai, W.S. et al., (1999) Molecular & Cellular Biology, Vol. 19, pgs. 4311-4323 **(Exhibit 12)**;

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16. Lai, W.S., Blackshear, P.J., (2001) Journal of Biological Chemistry, Vol. 276, pgs 2344-2354 **(Exhibit 13)**;
17. Landolofo, S., Gribaudo, G., Angeretti, A., Gariglio, M., (1995) Pharmacology & Therapeutics, Vol.65, pgs 415-442 **(Exhibit 14)**;
18. Levy, D.E., Garcia-Sastre, A., (2001) Cytokine & Growth Factor Reviews, Vol. 12, pgs 143-156 **(Exhibit 15)**;
19. Markowitz, D., Goff, S.P., Bank A., (1988) J. Virology, Vol.62, pgs 1120-1124 **(Exhibit 16)**;
20. Morganstern, J.P., Land, H., (1990) Nucleic Acids Research, Vol. 18, pgs 3587-3596 **(Exhibit 17)**;
21. Naldini, L. et al., (1996) Science, Vol. 272, pgs 263-267 **(Exhibit 18)**;
22. Player, M.R., Torrence, P.F., (1988) Pharmacology & Therapeutics, Vol. 78, pgs 55-113 **(Exhibit 19)**;
23. Southern, P.J., Berg, P., (1982) J Mol Appl Genetics, Vol. 1, pgs 327-341 **(Exhibit 20)**; and

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24. Zhou, A., Paranjape, J.M., Der, S.D., Williams, B.R., Silverman, R.H., (1999) *Virology*, Vol. 258, pgs 435-440  
**(Exhibit 21).**

Applicants request that the Examiner review the references and make them of record in the subject application.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone him at the number provided below.

No fee is deemed necessary in connection with the filing of this Information Disclosure Statement. However, if any fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,

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Form PTO-1449

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(Use several sheets if necessary)

Application Number	10/568,396
International Filing Date	August 12, 2004
First Named Inventor	Stephen P. Goff
Art Unit	
Examiner Name	
Attorney Docket No.	0575/67489-PCT-US/JPW/AJM

## U.S. PATENT DOCUMENTS

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
	1	US 5,776,696	07-07-1998	Salowe, S.P.
	2	US 6,251,620	06-26-2001	Hatada et al.
	3	US 2001/0011381	08-02-2001	Babiychuk et al.

## FOREIGN PATENT DOCUMENTS

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T <sup>6</sup>

 EXAMINER  
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**\*EXAMINER:** Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds of Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English Language Translation is attached.



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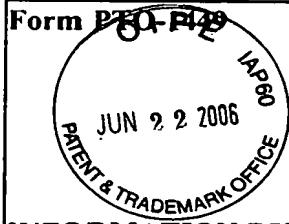
## NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	4	Gao, G. et al. (September 2002) "Inhibition of Retroviral RNA Production by ZAP, a CCCH-type Zinc Finger Protein" Science Vol. 297, pages 1703-1706	
	5	Bick M.J. et al. (November 2003) "Expression of the Zinc-Finger Antiviral Protein Inhibits Alphavirus Replication" J. Virol Vol. 77, No. 21, pages 11555-11562	
	6	Database NCBI Sequence Viewer, NP_766633, (2006) CCCH-type Zinc Finger Protein [gi:27375002] pages 1-21	
	7	An, D.S. et al., (1997) J. Virol, Vol. 71 pgs. 1397-1404	
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	10	Chen, C.Y. et al., (2001) Cell, Vol. 107, pgs. 451-464	
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	15	Lai, W.S. et al., (1999) Molecular & Cellular Biology, Vol. 19, pgs. 4311-4323	
	16	Lai, W.S., Blackshear, P.J., (2001) Journal of Biological Chemistry, Vol. 276, pgs 2344-2354	
	17	Landolofo, S., Gribaudo, G., Angeretti, A., Gariglio, M., (1995) Pharmacology & Therapeutics, Vol.65, pgs 415-442	
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	20	Morganstern, J.P., Land, H., (1990) Nucleic Acids Research, Vol. 18, pgs 3587-3596	
	21	Naldini, L. et al., (1996) Science, Vol. 272, pgs 263-267	
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	23	Southern, P.J., Berg, P., (1982) J Mol Appl Genetics, Vol. 1, pgs 327-341	
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